Arthroscopic Soft Tissue Biceps Tenodesis with ORTHOCORD™ Suture

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TECHNIQUE OF BICEPS TENODESIS
The long head of the biceps is uniquely located along the rotator interval and supported in place by a combined pulley-ligament system and insertion of the rotator cuff. As a result, this tendon can be injured either due to instability of the tendon out of the groove, partial tears, or a complete tear. These tears and instability can be associated with either an intact rotator cuff, partial-thickness tears of the rotator cuff, or a full-thickness torn rotator cuff. In cases where the rotator cuff pathology is minimal, a biceps tenodesis can be performed incorporating the long head of the biceps tendon into the rotator interval to prevent the distal deformity that is seen with tenotomy. The following is a biceps tenodesis technique of soft tissue to soft tissue in cases where the rotator cuff is intact.

POSITIONING AND PORTALS
The patient is positioned in the lateral decubitus position. Portals for the procedures are as follows. Three portals are used for the procedure. A standard posterior viewing portal is created. This is followed by an anterior portal which is adjacent to the anterior edge of the acromion, and finally a lateral portal 3cm off the lateral border of the acromion for bursectomy and knot tying.

Figure 1. This is an articular view of a left shoulder with an advanced tear in the substance of the long head of the biceps tendon.

Figure 2. Outside view of a percutaneous needle placement that pierces the rotator interval and long head of the biceps.

Figure 3. This is an intra-articular view of the spinal needle with the trocar removed piercing the long head of the biceps tendon.

Figure 4. The shuttle is introduced through the hollow needle and retrieved out through the anterior cannula. This shuttle is used to shuttle a stitch of ORTHOCORD Suture.

Figure 5. The spinal needle has been reintroduced, allowing for retrieval of the shuttle through the anterior cannula and shuttling the braided ORTHOCORD Suture originally placed, creating a transverse mattress stitch.

Figure 6. The spinal needle is reintroduced above prior stitch to introduce the shuttle followed by a second stitch.
Figure 7. The stitch is retrieved after an additional needle placement, creating crisscrossing sutures similar to a Mason-Allen effect.

Figure 8. Tenotomy of the long head of the biceps is performed next to the insertion on the superior labrum with the VAPR® S90 device.

Figure 9. The Scope is placed in the bursa and colored sutures are paired.

Figure 10. The sutures are retrieved and tied under direct visualization within the bursa.

Figure 11. The biceps stump of the long head of the biceps is well secured against the undersurface of the rotator interval-supraspinatus junction, thus completing the biceps tenodesis.

**POSTOPERATIVE COURSE**
The arm is placed in a sling for 3-weeks. Gentle pendulum exercises, active assisted external rotation and grip strengthening exercises are begun. After 3-weeks, the sling is removed and assisted forward elevation is begun. Strength and resistance exercises are begun at 8 weeks. Return to full activity at 3 months.
## ORTHOCORD™ HIGH STRENGTH ORTHOPAEDIC SUTURE

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## VAPR® SYSTEM

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